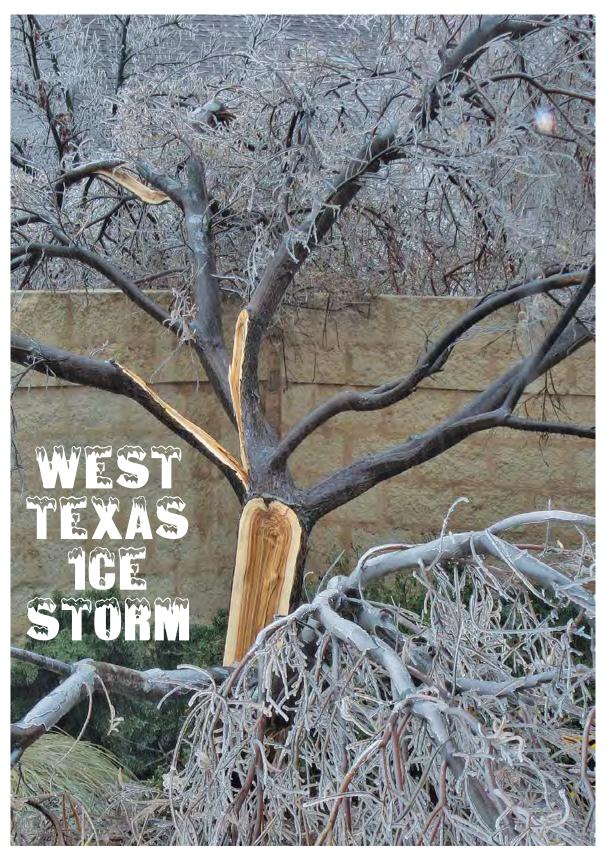
n the Shade

Vol. 38, No. 6 March, 2015





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April 30th 2015

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safer, this podcast series wants to hear about it!

To make this podcast real-world savvy, we encourage you to send ISA videos from the field. They can't do this without you! Using your smartphone, take a video of a work situation or practice that you would like to share with other arborists and send it to Bill Yauch at ISA headquarters (byauch@isa-arbor.com). The video must be less than five minutes long and should be shot horizontally. Please include a brief description of the video in your email to help staff determine if they can use your material to create content for the podcast. Questions? Email Bill Yauch. If your video is selected, you will be contacted when the podcast is ready for release.

ON THE COVER

Our cover photo was taken by Eric Siegmund of Midland. As freezing rain destroyed the desert willow in his back yard, he took photos and posted them on his blog: http://www.ericsiegmund.com/fireant/2015/01/150102-icestorm.html See more about the West Texas ice storm on page 9.

In the Shade

is published six times a year by the Texas Chapter, International Society of Arboriculture.

Editor: Oscar S. Mestas Texas A&M Forest Service omestas@tfs.tamu.edu 915-834-5610

Advertising Representative:
Duane Pancoast
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ITCC, with Workshops, Arbor Fair & Expo March 20-22, Tampa

In addition to the competition with the world's best climbers, there will be hands-on workshops with industry leaders as well as the Arbor Fair and Expo.

Workshops will cover pruning, safety, diagnostics, cabling, and appraisal. The Arbor Fair will showcase the profession and offer a fun climb and other kids' activities. The Expo is an outdoor trade show that will give you the chance to try out the latest industry equipment. Details and workshop registration at: http://www.isa-arbor.com/events/treeclimbingchampionships/

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The ISA Annual International Conference and Trade Show will bring you the same great educational and networking opportunities as it has for more than 90 years. Events include:

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Plan now to attend by reserving your room at the Gaylord Palms Resort and Convention Center. Get the latest updates on educational opportunities, registration and more at

http://www.isa-arbor.com/events/conference/index.aspx



Register for Texas Tree Climbing Championship 2015

by Kevin Bassett, TTCC Chair

The TTCC returns to Fort Worth's Trinity Park in 2015! This great venue for tree climbing has hosted our championship many times since the event first started in 1983. It was to be the site of the 2016 ITCC until the ISA conference and the ITCC separated this year. The trees are of international event quality, and the TTCC team is excited to use a few of these great bur oaks for the TTCC competition. Mark your calendars now and plan to come and join in the event. The competition will take place on June 12 and 13, 2015.

Additionally, the TTCC committee has put together an excellent all-day educational program for Thursday, June 11. This seminar is aimed at those who work in the field: climbing, pruning, and removing trees. The TTCC committee strives to bring top-level industry leaders to present this seminar, and this

year is no exception. I am proud to announce that we have secured the services of North American Training Solutions. This company is well known within the industry as a top source for training in forestry and arboriculture. Scott Prophett and his crew of experienced trainers will present a valuable program covering the subjects of rigging and aerial rescue.

Rigging to safely remove trees and limbs is a necessary task which is common in day-to-day tree care operations. At the seminar you can expect to learn time- and effort-saving "tricks of the trade" which will make your jobsites safer and more efficient, which will in turn add to your bottom line. Rescue training will also give you new ideas and techniques, as we work in one of the most dangerous occupations. With the proliferation of SRT climbing systems, an aerial rescue refresher is prob-

ably needed. Rescue of a victim using this climbing technique is a bit different from the normal DdRT climbing systems we all have grown up with. It gives a crew a lot of confidence to know that their members are able to help them to safety should an incident in the tree occur, regardless of climbing system.

In my mind, any training which adds to a "safety first" mindset is sorely needed. As an industry, we seem to have a growing need to improve our accident statistics, so when you're paying that horrendous insurance bill, think about what we all need to do to make our jobs safer. Having fewer accidents will in turn lead to paying less for insurance. If we spill less blood, we'll save more money.

Register online for the seminar and the TTCC at www.isatexas.com. If you are unable to register online, please call me at 972-877-0358, and we will arrange to mail the forms to you.

For those of you who would like to be involved in the judge and technician aspects of the event, please contact Head Judge Guy LeBlanc at 512-301-8700. This event not only exists to determine a Texas Chapter Climbing Champion to send to the ITCC, but also seeks to educate and promote the art and science of arboriculture among the membership and the general public as well. I look forward to seeing you there when we once again "Gather at the River."



Registration Fee (Non-ISA Members): \$115

Master's Challenge: Saturday, June 13th, 2015

Kids & Adult Recreational Climb Open from 8:00-12:00

Registration Deadline: June 5th, 2015

PLANTING/PRUNING WORKSHOP GETS TOP GRADES FROM STUDENTS

by Zaina Gates, East Texas Regional Urban Forester, Texas A&M Forest Service

The Jacksonville Tree Planting/Pruning workshop in February was a hit. We limited the class to 40 participants, and we had 39 register. The students came from Athens, Palestine, Rusk, Nacogdoches, Jacksonville, and Tyler. The weather could not have been better for an outdoor day of hands-on learning and fun. The day started off brisk and cloudy, as it should during tree planting/pruning season, but ended in beautiful sunshine.

The event took place at the Ruth Bowling Nichols Arboretum, located behind and managed by the Jacksonville Texas A&M Forest Service district office. It was sponsored by Joe Smith Farms, who donated two trees for the planting demo. We rotated the students through three stations: tree planting, young tree pruning, and mature tree pruning. The tree planting station, taught by TFS urban forester Matt Weaver, covered techniques to help increase survivability and improve root establishment, such as root washing and root trimming. A red maple was added to the arboretum during the demo.

The young tree pruning station, taught by TFS urban forester Zaina Gates and TFS district forester Jason Ellis, covered methods to train young trees for structural stability and good form. Students brought their pruning shears, loppers, and pruning saws and practiced proper cuts and the 3-step pruning method on a few young trees along the arboretum trails.

The mature tree pruning station, taught by TFS urban forester Paul Johnson, covered reasons for and proper approaches to pruning mature trees, as well as safety and equipment.

Comments from the participants were, "I learned more today than at all of the seminars and workshops I have ever attended," "I have been inspired to go home and attack long neglected oak trees, and the workshop saved me from making some serious mistakes," and "Presenters were an excellent and fabulous team." They rated all of the stations as "very informative," and said we should do it again!



Jason Ellis demonstrates the 3-cut method.

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Professional Division: 1st place:

Bio Landscape and Maintenance. Their winning time of 14 min., 28 sec. shattered their old mark of 17 minutes.

8TH ANNUAL HOUSTON TREE PLANTING COMPETITON

The Greater Houston 8th Annual Tree Planting Competiton February 7 went very well. Sixteen teams planted 1,600 trees – very cool. Special thanks to Mark Kroeze and his San Antonio team and Hannah Cruce for filling in as judges.

- Mickey Merritt



Amateur Division:

Coca Cola had four teams and won 1st, 2nd and 3rd. Times were: 47'48" 53'21"

63'07"

Coca Cola bear was there. He's way in the back.



Professional Division: 2nd place: Davey Tree Expert Company.

Time: 47'12"

Student Division:

MacArthur High School had two teams. Times were: 80'17" and 119'42"





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LEGISLATIVE ALERT!

by Terry Kirkland, Chair of the ISAT Legislative committee

There have been two bills introduced so far this legislative session that may be of concern to ISAT members:

HB1442 (http://www.legis.state.tx.us/tlodocs/84R/billtext/html/HB01442I.htm)

and HB1472 (http://www.legis.state.tx.us/tlodocs/84R/billtext/html/HB01472I.htm)

introduced by Representative Paul Workman. I will attempt to lay out the points that may be of concern to ISAT membership, and if you have a concern please contact your state representatives and voice your opinion.

HB1442

- Allows property owners to remove vegetation that they deem a fire hazard with little or no restrictions to size or species or a firewise assessment by a firewise trained person.
- · Doesn't limit tree removal to firewise buffers
- Exempts ordinances, rules and regulations in a municipality, county or political subdivision
- · Focuses on cedar, salt cedar and mesquite removal
- There may be some incorrect expectations by some legislators of conserving water by removing/clear cutting cedar

HB1472

- Allows the attorney-general the authority to sue a city on behalf of a developer
- Increases the risk cities take when they deny a developer's grandfathering claim
- May inhibit municipalities from enforcing tree ordinances due to the fear of litigation

This alert is meant to inform the ISAT membership as to items that may be of concern to them during the current legislative session. I will continue to monitor all bills as they pertain to trees and or arborists. Feel free to contact me about any legislative matter you may have concern about. tkirk99@yahoo.com



Parts of West Texas Hit by ICE STORMS

by James Tuttle

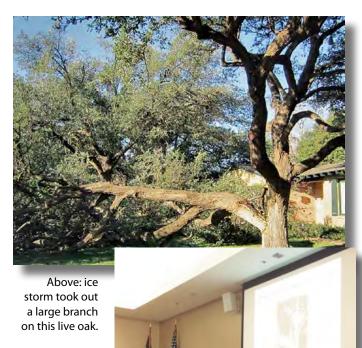
The first week of January, parts of West Texas were hit with the worst ice storm the area had ever experienced. The damage was from a line about half way between Lubbock and Midland south to Alpine. The damage was primarily in live oaks and pines.

Many arborists have said, perhaps only to themselves, "Ice is hard on trees, but, dang, it is good for business." As happens with many storms, many tree companies—some legitimate, some not—descended on the area. For a couple of weeks, it seemed that everyone with a pickup and trailer bought a chain-saw and went into the tree business. Most are gone now.

Tree Loving Care went from pretty slow to overwhelmed in about four hours and will be working on the aftereffects of the storm for months. We are still sending crews from Lubbock to the Permian Basin and Alpine.

For having little experience with storms of this magnitude, the cities in the area did a pretty good job of handling the debris. There have been many lessons learned.

In Midland, shortly after the storm, Tree Keepers put on a well-attended workshop called After the Storm–Tree Care 911 to inform the public about what they needed to do next. It was a round table type of format with Oscar Mestas, TFS Urban Forester from El Paso; James Tuttle and Mark Walters, local arborists; Debbie Frost, retired TAMU Hort Agent; and Laurie Williams, director of Midland Parks, as the panel members.



Right: Tree Care 911 panelists share knowledge.

Photos show tree destruction by FREEZING RAIN



Midland resident Eric Siegmund lost a beautiful desert willow in the January ice storm. Initially the tree appeared okay, but it didn't survive the next day's freezing rain. As branches broke and the tree went from bad to worse to unsalvageable, Eric took photos and posted them on his blog. See the whole sad story at:

http://www.ericsiegmund.com/fireant/2015/01/150102-icestorm.html



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When a client asks me about a tree problem, it's usually for one of three things: insects, disease or a nutrient deficiency. Trees add beauty and value to their property, and the last thing my customers want is to lose one. That's why Mauget is a key part of my treatment plan. Mauget products are effective and easy to use and with Mauget, I can quickly help the tree regain its good health and leave knowing my customer is happy.

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Helping their business by helping others . . .

Arborists Volunteer at the Warrior & Family Support Center

by David M. Vaughan, Certified Arborist, Etter Tree Care

Giving time, advice, and work to a worthy cause is one of the best ways you have for increasing your commercial work load and bottom line. In the September newsletter we looked at a project done through the San Antonio Arborist Association at a small community cemetery. In this issue I would like to cover a volunteer project that is a company endeavor.

We now do most of the tree care for the Warrior and Family Support Center (WFSC). Many of our country's wounded warriors are sent to San Antonio Military Medical Center (SAMMC) for treatment and recovery. They are often here for more than 12 months. These warriors need family involvement to help with their recovery. So the military initially provided three acres of land and our community donated the funds and built a facility to provide the warriors and their families a place just for them to be together as a family. We are talking serious money: \$5.8 million to build a 12,500-square-foot facility and adjoining garden. About \$4 million to build a six-acre park with walking/running trails, an amphitheater, and playgrounds for the kids. There are shade structures with misting systems to keep burn victims comfortable. Everything was built with the wounded warrior in mind.

They keep improving the park and just completed a soccer field/volleyball court with artificial turf. The volleyball net is only about four feet tall so you can play without prosthetic legs or you have to sit down. And if you are feeling sorry for the guys without legs, get ready to have a volleyball face spike because the games are serious and very competitive. Legs get in the way and slow you down.



Luis Carrillo on ground and Hector Narvaez in tree installing a bolt and cable in a split hackberry in Freedom Park at the Warrior and Family Support Service Facilities.

Monetary donations to WFSC can be made online at **ReturningHeroesHome.org** or 210-916-8367.

San Antonio is a military town. Everything in the family center is donated by the community. There is a commercial kitchen that is completely manned by volunteers. The pantries are full. The two commercial size refrigerators are full. The walk-in freezer is full. The gardens supply herbs and fresh fruit in season. The families and warriors can get a prepared meal almost anytime or they can prepare what they want anytime.

There is a state of the art computer lab and business center, all donated. There is a TV entertainment media room with many large screen TVs (I'm guessing 100-inch screens), each with two leather home video chairs. All with video games, computer access, movie access, and a large DVD library with the most current movies available. All donated by our community. It is a one-of-a-kind facility, the only one in the US. The only one in the world. Every brick, every plant, every salary, all provided by the community. If you ever visit, once the goose bumps recede and the tears dry, you will also be a volunteer and part of this community.

The dominant tree in the six-acre Freedom Park is sugar hackberry (*Celtis laevigata*). I was originally asked to inspect the trees and assess risk (before TRAQ) by the Gardening Volunteers of South Texas (GVST), who volunteer at the gardens every Tuesday. (You do not have to be a member. If you show up on Tuesday, they will put you to work). So with hackberry, construction, and the military designing support systems, we had some serious conditions. I forced the issue with my boss and we quickly got a crew on site to remove a couple of high risk hackberries and to prune a lot of large dead branches. The crews loved it because we got there on a Tuesday and the GVST volunteers moved all the brush to the chipper. They also got to meet some of the warriors and their wives and kids and grandparents. They dried some tears.

Ed, my boss, was not too happy about another volunteer project. So the next inspection, I made sure I was not available and asked him to cover for me. After the tears dried and the goose flesh was gone, he informed us that WFSC was a priority job to be moved to the top of the list anytime they needed anything. Anything, anytime, whatever they need.

We spend no money for advertising. We put our entire advertising budget into volunteer support of worthy programs. Although not our intention, more business is generated from this volunteer activity than we could possibly receive from money spent on advertising. Every person, every group we assist becomes a sales rep for us. I almost never have an appointment anymore with a potential new client that is not a referral. And unlike the 1 in 10 sales generated by advertising, almost 100 percent become clients. The client is sold before I arrive. They just want to know what they should do, how much it will cost and how soon we can get started.

Consider volunteering your time and work crews. It is very satisfying for you and your crews to do something that makes you feel so good. It is amazing how it can increase your sales and profit and reduce the work load on you and your sales staff. A real win/win for you and for the cause you support.

NEW MEMBERS JANUARY-MARCH

Thomas Paine Pamela Abee-Taulli Austin Carl Fiss Spring Cedar Park Tyler Froberg Federico Partida Jerome Alder Pearland Christopher Garza Richard Peraino Patrick Anderson Charlotte Houston Trudy Bahr San Antonio Paul Goodman San Antonio **Tony Poncik** Pablo Ramirez Kurt Beilharz John Gurasich Dallas Austin **Taylor Guynes** College Station Sharon Reed Erik Belcher Houston Richard Bewley William Hajdik Sugar Land Alejandro Reyes Tulsa Mesquite Ron Richison Cory Bird North Richland Hills Ronald Hall Joseph Booth College Station Randall Henderson **Bullard Billy Roberts** Brad Bradsher Theresa Hicks Jackson Little Elm **Shohn Rodgers** Austin Eduardo Jasso Val Roming **David Brantley Fairview** Baytown **Andrew Breitbarth** Cameron Johnson Allen **Robert Ross** Waco San Antonio Cam Joslin Conroe Shawn Schlachter Kyle Brigham Nathan Brummer **Round Rock** Gary Kazee Harker Heights Kirsten Schneider **Robert Brundrett** Manvel Simon Kenyon Austin Jerry Seaman Shane Kistner Joseph Soileau Rodrigo Caballero Austin Austin Robey Canaday Jr Dallas Amy Langbein **Dallas** Joey Soileau Jorge Cantu **Edinburg** Paul Lara **Round Rock Keith Swallers** Theodore Lathey Samuel Cantu Austin Lubbock Lori Tracy Joseph Castille Craig Lenocker Coppell Scott Tucker Austin Clay Chaote Josh Leonard Ore City Kenneth Turner Argyle Dallas George Leszkowicz Mclean, VA Trent Upchurch Mark Clampitt Jorge Colom Billy Leverett Jr. Corrigan A. Urbina Houston Mc Kinney Collinsville Ashton Walden Justin Cox Nathan Lierly Tina Waliczek-Cade Mark Cuellar San Antonio Bill Long Midwest City, OK Gumecindo Lopez John Waters Jeremiah Davis **Dallas** Austin **Andrew Machuca** Alex Wallace Jonathan Davis Amarillo Temple Travis DeBaun Austin Chuck McLellan Austin Jenny Wallgren **Daniel Duncum** Tyler Scoitt McManigal Austin **Richard Williams** Leander Alex Montoya **Ross Womack** Kevin Farmer Austin Jason Fischer James Neeser Forest Lake, MN Lu Zhang Schertz Wade Ninemire



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Updating our Knowledge of Cedar Trees and Fire

by Don Gardner, Registered Consulting Arborist #438, Certified Arborist TX0228

It is very important that people keep a perspective when deciding whether to remove cedars (ashe junipers) when they are concerned about wildfires.

Removing dead trees, removing dead wood on the ground, thinning cedar thickets, and pruning up old cedars are all essential elements of fire safety.

However removing healthy, large or old-growth cedars is based on a misunderstanding of cedars' place in the natural history of Central Texas. Removing them helps destroy the critical ecological balance of the Balcones Escarpment and the many environmental benefits of ashe juniper.

There is a strong old cultural bias against cedars based on outof-date information. For decades there was a popular belief that cedars "are water hogs that suck up all the water from other plants," and "they are not native."

Renewed research in this century blasts both notions. The truth is that all western junipers in North America have compact root systems and are, in fact water thrifty. Among others, Texas A&M University researchers now say that Hill Country live oaks use substantially more water than cedars.

As far as native or not is concerned, I find two to three hundred year old junipers in our region. Most of these are found in isolated canyons (the native habitat of ashe juniper) but I find them regularly in yards and pastures.

After the cow era in Central Texas (1700-1970) overgrazed the region, causing massive erosion and top-soil loss, the canyon

cedars moved out onto the open ground. There was perhaps no other plant available that could germinate on bare caliche and limestone and multiply like cedars did to begin covering and restoring abused land. In forestry they would be called a "pioneer" species.

Cedars did their new job very well and we all owe them a debt of gratitude for their amazing ability to build top soil under their branches from needle cast and pave the way for our other natives to regain a foothold.

Cedars are responsible for kick starting the natural reforestation process that has boomed since the 1970s in Central Texas.

Certainly Central Texas faces substantial fire threats from areas that have gotten overgrown. Those particular areas should be targeted and, if on private property, grants should be given for selective thinning, firewise management and forest restoration.

As a general rule, all single-trunk cedars 15 inches in diameter or larger should be retained and pruned up.



What's the Big IDea?

Can you identify this native Texas tree?



If you know this tree, correctly identify it on our facebook page. If you don't know it, check the page for the answer in a few days. *Hint: winter showoff.*

Last Big IDea winner



David Richardson correctly identified our last BiglDea tree: Texas pinyon (or papershell pinyon), *Pinus remota*.

COLLEGE FOOTBALL PLAYOFF TREE PLANTING CHALLENGE

The first ever College
Football Playoff Tree
Planting Challenge was held
the week before the game at
High Oak Park in Arlington,
site of the championship game.

Contestants from the University of Ohio and The University of Oregon were invited to compete, along with almost 20 universities from Texas! Several of the universities that participated have Tree Campus USA designations. This designation is very similar to the well-known Tree City USA program, except it is geared toward college campuses instead of municipalities. (http://www.arborday.org/programs/treecampususa/). Participants Ohio State, Dallas Baptist and Brookhaven College are all designated as Tree Campus USA.

Each team was timed on planting 10 trees and planting them correctly. Judges were watching for penalties such as planting too deep, improper mulching, poor root ball

handling, etc. In the end it was no contest, as the team from Ohio State University ran away with first place. They completed planting all 10 of their trees correctly before any other team had even finished five!

Several TFS employees participated in the event, including Associate Director Bill Oates, Forest Health Manager Ron Billings, Urban and Community Forestry Coordinator Paul Johnson, Staff Forester Gretchen Riley, and Regional Urban Foresters Courtney Blevins (Ft. Worth) and Richard Leon (Dallas).

- Courtney Blevins, CF, CA, Regional Forester, Texas A&M Forest Service, Ft. Worth Region

First place winners: Ohio State.



Matt Grubisich with the Texas Trees Foundation explains the rules and proper planting procedures to the contestants.



Paul Johnson, Urban and Community Forestry Coordinator, Texas A&M Forest Service; Shawn Moore, Community Affairs Director, College Football Playoff; Janette Monear, President, Texas Trees Foundation; Robert Cluck, Mayor of Arlington; Jack Groh, Director, NFL Environmental Program; Lemuel Randolph, Director, Arlington Parks and Recreation.

Bastrop replanting continues . . .

1,766 seedlings planted on February work day

James Hagan with dibble bar next to newly planted loblolly.



Matt and Adri Hagan pause on the trail next to a loblolly which germinated from seed after the fire.



Matt Hagan plants a loblolly.

by Racbel Hagan

At a February 7 tree planting at Bastrop State Park, our group of around 30 volunteers planted 1,766 seedlings—the largest number planted by a group so far this season. With all the other planting dates throughout the winter, the ongoing replanting effort is amazing.

This is the third year the park has hosted volunteer reforestation opportunities following the 2011 Bastrop County Complex Wildfire. The wildfire affected 96 percent of Bastrop State Park.

The park provides several weekends of tree planting open to the public between December and February. Volunteers receive safety and planting demonstrations. You can sign up through Volunteer Match (www.volunteermatch.org/search/org757352.jsp). In addition, Tree Folks coordinates private property plantings and seedling giveaways in Bastrop.

When we were near the road people honked, waved and said "Thank you." It is still sad to look at the devastation when you are in the park and in Bastrop. At the same time, all the work being done by everyone to bring back the lost pines is an inspiration. A walk through the trails gives you a close up of the re-growth and renewal that is happening.



What Is Killing Scattered Pine Trees In East Texas?

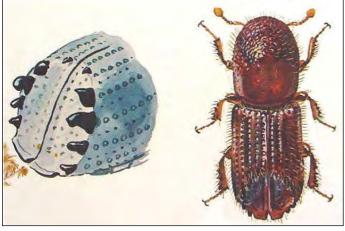
by H. A. (Joe) Pase III, Texas A&M Forest Service Retired

s I traveled around East Texas this past fall, I noticed numerous, scattered dying or dead pine trees as evidenced by their red or brown needles. These trees may be in the forest, along the roadside, or in urban settings. Many people have asked what is causing this. So, let's address it.

First, let me make it clear. This is NOT the dreaded southern pine beetle (SPB), the most destructive forest insect in the southern United States. The SPB, capable of killing large areas of pine timber, has not been found in East Texas since 1997. We hope this trend continues.

The scattered pine trees we see dying now are being attacked and killed by different pine bark beetles commonly called pine engraver beetles. There are actually three different species of engraver beetles (also called Ips beetles), but they all behave in a similar way. Typically, engraver beetles begin infesting the top of the tree and work their way down to the mid and lower bole (trunk). The classic symptom of their attack is yellow or red needles in the upper half or so of the crown of the tree; needles on the lower branches may still be green. Eventually, however, all the needles in the crown will turn red. By the time a homeowner or landowner notices the attack (usually red needles), it is too late to save the tree. When all the needles are red, the tree is dead.

Engraver beetles are quite small (about 1/8 to 3/16 inches long; see drawing) and brown to dark brown in color. They fly from a tree they have killed to find a new host tree to attack and they only attack pine trees. It is impossible to predict which tree or trees they will attack next. Engraver beetles won't attack healthy trees; rather, they select weakened or stressed trees to attack. Unfortunately, these weakened trees are very difficult for a person to identify as they seldom exhibit any external symptoms. In urban settings, it is common to see pine trees attacked by engraver beetles following construction of a new house where soil-disturbing activities have damaged roots



on the rear of the beetle.

and thus weakened the tree. Also, Ips beetles tend to attack scattered trees in a forest stand that has been disturbed by logging (such as thinning), since this activity disturbs the roots of residual trees. In a forest situation, the tree mortality caused by Ips beetles is usually scattered and involves relatively few trees, especially when one considers the entire stand. When these beetles select a tree in your yard to attack, it can be very expensive to have the dead tree removed. In a forest situation, removal of the dead trees is usually not economically feasible because of the scattered pattern of dead trees. Also, felling Ipskilled trees in the forest is not necessary and does not provide any control. For a photo essay about Ips, see the first link at the end of this article.

When the beetles find a suitable host tree, they will land on the bark surface and bore (chew) a small hole in the bark so they can enter the cambium area between the bark and the wood. They do not bore into the wood of the tree. They mate, lay eggs, and feed in the cambium. This process basically girdles the tree under the bark and causes the tree to die. It is common for the beetles to kill one or two trees and move on, leaving other nearby pine trees unattacked.

The engraver beetle activity we are seeing now is most likely related to the typical late summer and early fall drought that is common in East Texas. Even though 2014 has seen generally adequate rainfall across East Texas, there have been periods of fairly dry weather. There could even be some residual stress carried over from the 2011 drought from which selected trees have not fully recovered. Fire, hail, ice, lightening, wind, standing water, disease, logging, construction, and other factors also may make pine trees more susceptible to engraver beetle attacks.

How can these beetles be controlled? Unfortunately once engraver beetles infest a tree, it can seldom be saved. Treating a tree with insecticides after the needles have turned yellow or red won't save the tree. Also, spraying the bark surface of a tree to prevent Ips attack is not practical or very effective. Because it is impossible to know beforehand which tree the beetles will attack, spraying all the trees in your yard or forest to prevent attacks is not recommended. In addition, the entire bark surface from the crown to the ground needs to be covered with spray in order to be effective. This is difficult to achieve, and in urban areas there is concern about spray drifting onto neighboring property. A new systemic insecticide, sold under the trade name TREE-äge® has proven effective for protecting high-value pine trees from engraver beetle attack. But TREE-äge®, containing the active ingredient emamectin benzoate, is a restricted-use pesticide. This means only a certified pesticide applicator can purchase or apply this chemical, and injections must be repeated every few years at relatively high cost for prolonged protection. The best approach to preventing an Ips beetle Drawing of an lps beetle (greatly enlarged) showing the short spines problem, especially in the urban environment, is to keep your pine trees as healthy as possible. This includes deep watering during dry periods and avoiding damage to the tree's roots. As already stated, in a forest situation control is not recommended.

A few closing comments are in order. After a pine tree dies, it is common to hear a "chewing" or "crunching" sound coming from the tree. Many people believe this is noise made by the pine beetles, but that is not correct. Pine beetles are so small their chewing cannot be heard. The chewing noise is actually made by the larvae or grubs of a large beetle commonly called a sawyer beetle or longhorned wood borer. These beetles infest a tree soon after it dies (they do not kill the tree) and the larvae initially feed in the cambium but eventually bore into the solid wood. As the larvae feed, they make the chewing sound commonly heard. Many East Texans are familiar with the larvae of this beetle as they can be found under the loose bark of recently killed pine trees and are often collected for fish bait.

As cooler temperatures and typical winter rainfall begin to occur in East Texas, Ips activity should diminish. Hopefully, most of the tree mortality has already occurred (at least for this year).

Another situation not related to pine beetles also occurs in the fall. Pine trees will often exhibit small branches or tufts of needles that turn yellow or red scattered through the crown. This is NOT a sign that Ips beetles are beginning to attack. This is natural and normal and not harmful to the tree. When Ips beetles attack, *all* the needles on several branches will turn from green to yellow to red.

Finally, for forest landowners, don't panic when you see a few scattered trees dying in your stand. Engraver beetles are probably at work, but their impact on the total stand is typically very small. Don't think you must harvest your entire stand because you are going to lose it to the beetles. Typically, all or most of your trees will not be killed by Ips beetles. If there is ever any doubt or question, contact a qualified forester or your nearest Texas A&M Forest Service office for assistance and guidance.

For more details, please refer to the following Texas A&M Forest Service websites:

http://texasforestservice.tamu.edu/main/popup. aspx?id=3398 (photographic evidence of Ips attacks)

 $\label{lem:http://texasforestservice.tamu.edu/uploadedFiles/FRDSF/FMIS/Ips_Bark_Beetle.pdf \quad \blacksquare$



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- Q. What's Black and White and Read All Over?
- A. Steve Houser's
 Opinion Piece
 on the Dallas
 Tree Ordinance



To find out more about Steve's latest battle on behalf of tree protection and preservation, please read his piece on the opinion page of the *Dallas Morning*News. You can find it at:

http://www.dallasnews.com/opinion/latest-columns/20150127-steve-houser-dallas-tree-ordinance-apparently-is-not-a-priority.ece



BAJO LA SOMBRA

Un Ejemplo Correcto de la Técnica "Entresaca"

por Micah Pace, Miembro de la Junta Directiva de ISAT y Arbolista con Preservation Tree Services

En la arboricultura hay varias técnicas para mantener los árboles en buen estado. Una de ellas es la entresaca o "thinning" como se dice en inglés. El objetivo de esa técnica es la reducción del volumen interno de la copa del árbol. ¿Cuáles son los beneficios de esta importante técnica?

Primero la reducción del volumen de la copa reduce el peso de la copa y ayuda a que se desarrolle una estructura más resistente y segura especialmente durante épocas ventosas para evitar el quebrantamiento de las ramas. Segundo la entresaca reduce el desarrollo de hongos sobre el forraje de la copa de los arboles ya que el viento ayuda evitar que la humedad se quede en las hojas. Otro beneficio de esta técnica es que más luz puede pasar al suelo y eso ayuda a mantener el

Antes de la entresaca

Después de la entresaca

césped del patio. Además la entresaca mejora la vista estética del árbol ayudando a mejorar la apariencia de la propiedad.

Las fotos muestran el mismo árbol antes y después de la entresaca. Es fácil ver como estaba tan denso el árbol en la primera foto y en la segunda el árbol está más abierto y limpio dando a la propiedad una apariencia mantenida.

No todos los arboles requieren una entresaca. Normalmente un árbol joven o recién sembrado no va a necesitar la técnica entre los primeros 5 años. Sin embargo arboles más establecidos o maduros pueden beneficiarse de esa forma de mantenimiento. También hay una diferencia entre las especies por la arquitectura de sus copas. Algunos de ellos tienen copas naturalmente abiertas tal como el olmo americano (American elm) mientras otros tal como el encino (live oak) tiene una corona muy denso que requiere una entresaca más frecuente.

Hay varias técnicas en la arboricultura y cada una de ellas pueden ayudan a cumplir ciertas metas para lograr un buen mantenimiento de los árboles o propiedad. Es muy importante tener un plan bien definido para proveer y dar mejor servicios

> a los clientes pero sobre todo hay que escoger la técnica más apropiada para las necesidades de los árboles.

Saludos y cuídense mucho. ■



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Photo: Brian Bixler. Arborist: J. David Driver (the X man).

Doug Edwards, Arborist Tree Care Enterprises, Inc.



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